

In the Claims

1. (currently amended) A digital sensor for monitoring wear of a lining material of disc brakes, which sensor is to be attached at an end of an adjustment shaft of an adjusting mechanism for adjusting the position of brake pads in relation to a brake disc, which sensor comprises at least two code parts, of which one is rotated continuously by rotation of the adjustment shaft, characterized in that the code part rotating continuously is a code wheel ~~and that the other code parts are one or more sliding parts in the form of a code rack, or a sleeve which is moved in a linear fashion or one or more code wheels.~~
2. (previously presented) The sensor of claim 1, characterized in that the code parts not rotated continuously by the rotation of the adjustment shaft are moved intermittently by the rotation of the adjustment shaft.
3. (previously presented) The sensor of claim 2, characterized in that it further comprises detectors directed towards the code parts, a connection part of one of the code wheels drivingly connected to the adjustment shaft of the disc brake and a printed circuit board (PCB) and that the code parts have code paths turned towards the detectors of the printed circuit board (PCB).
4. (currently amended) The sensor of claim 3, characterized in that the code on the at least two code parts ~~one or more code wheels and/or one or more sliding parts,~~ respectively are formed by magnets, by light and dark sectors or by holes or no holes.
5. (previously presented) The sensor of claim 4, characterized in that the detectors are received on the printed circuit board (PCB); that the printed circuit board (PCB) has

circuitry to relate the signals from the detectors to the actual wear of the lining material of the brake; that the two or more code parts are arranged on the same side of the printed circuit board (PCB) or on opposite sides of the printed circuit board (PCB); and/or that a Graycode is used.

6. (previously presented) The sensor of claim 5, characterized in that the detectors are optical detectors, magnetic sensors or mechanical switches.

7. (original) The sensor of claim 6, characterized in that the detectors are magnetoresistive sensors or hall effect sensors.

8. (currently amended) The sensor of claim 18 ~~claim 7~~, characterized in that the code wheel rotated continuously by the adjustment shaft or a part drivingly connected to the code wheel, has a finger for co-operation with teeth of the sliding part and that the finger is arranged to advance the sliding part a distance corresponding to one tooth for each turn of the code wheel.

9. (currently amended) The sensor of claim 7, characterized in that seven detectors are arranged on the printed circuit board (PCB) for reading of up to four different paths on each of the other code parts ~~code wheels and the sliding part~~.

10. (previously presented) The sensor of claim 8, characterized in that a part drivingly connected to the adjustment shaft or an extension of the adjustment shaft is received in a slot of the sliding part and/or that a clamp is biased by means of a spring against teeth of the sliding part.

11. (currently amended) The sensor of claim 7 ~~claim 10~~, characterized in that the sensor comprises three code parts.
12. (previously presented) The sensor of claim 11, characterized in that the three code parts are two code wheels and one code rack.
13. (previously presented) The sensor of claim 11, characterized in that the three code parts are one code wheel and two code racks.
14. (currently amended) The sensor of claim 7 ~~claim 10~~, characterized in that the sensor comprises two code wheels.
15. (cancelled)
16. (cancelled)
17. (cancelled)
18. (new) The sensor of claim 1, wherein, at least one of the at least two code parts, other than the one which is rotated continuously by rotation of the adjustment shaft, comprises one or more sliding parts in the form of a code rack.
19. (new) The sensor of claim 1, wherein, at least one of the at least two code parts, other than the one which is rotated continuously by rotation of the adjustment shaft, comprises a sleeve which is moved in a linear fashion.

20. (new) The sensor of claim 1, wherein, at least one of the at least two code parts, other than the one which is rotated continuously by rotation of the adjustment shaft, comprises one or more code wheels.